CLAIMS:

1. Apparatus for the processing of a sectional image (I) that is reconstructed from X-ray projections of an object from different directions, the apparatus being adapted to execute the following steps: a) determination of a baseline function (B) that describes spatially slowly varying artifacts of the sectional image (I); b) calculating a corrected image (I*) by compensating the original sectional image (I) with the help of said baseline function (B).

2. Apparatus according to claim 1, characterised in that the sectional image (I) represents a three-dimensional volume, and that the corresponding three-dimensional baseline function (B) is composed of separate two-dimensional baseline functions that are calculated for two-dimensional slices of the sectional image (I).

3. Apparatus according to claim 1, characterised in that the determination of the baseline function (B) comprises the steps of a) segmenting areas (M) from the sectional image (I) in which the reconstructed X-ray density lies within a given interval; b) determination of the baseline function (B) based only on the data of said segmented areas (M).

4. Apparatus according to claim 3, characterised in that the baseline function (B) is determined by fitting a parametric model function to the data in the segmented areas (M).

5. Apparatus according to claim 4, characterised in that the parametric model function is a spline function and/or a polynomial, preferably a polynomial of sixth degree.

6. Apparatus according to claim 3, characterised in that the baseline function is determined by low-pass filtering of the data in the segmented areas (M).

7. Apparatus according to claim 1, characterised in that the baseline function is determined by a) spectral analysis of the sectional image (I) or the segmented areas (M) of the sectional image; b) composition of the baseline function from only the lower frequency components of the resulting spectrum.

8. Apparatus according to claim 1, characterised in that image areas outside the object are segmented and excluded from the correction with the baseline function (B).

9. Apparatus according to claim 1, characterised in that it comprises a rotational cone beam X-ray device for the generation of X-ray projections of an object.

10. Method for the processing of a sectional image (I) that is reconstructed from X-ray projections of an object from different directions, comprising the following steps: a) determination of a baseline function (B) that describes spatially slowly varying artifacts of the sectional image (I); b) calculating a corrected image (I*) by compensating the original sectional image (I) with the help of said baseline function (B).